

The nightjars of Zaïre

by M. Louette

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With the separation as full species of *Caprimulgus clarus* from *C. climacurus*, *C. nigriscapularis* from *C. pectoralis* and *C. ruwenzorii* from *C. poliocephalus* (but see below) in *Birds of Africa* (Fry & Harwin 1988), and with the description of a new species (Louette 1990), the avifauna of Zaïre includes no less than 17 (or 15 if suspected conspecifics are lumped) species of nightjar. Chapin (1939), Schouteden (1951) and Lippens & Wille (1976) discussed their occurrence in Zaïre, and since then few additions have been mentioned. Basing myself on the collection in the Koninklijk Museum voor Midden-Afrika (KMMA), it is possible to correct and complete Zaïre nightjar status and distribution in relation to *Birds of Africa* (the new species will be described elsewhere). Incidentally, when the samples used by Jackson (1984) for his African key are considered, it is clear that the KMMA collection is very important on the African scale. A few comments on neighbouring countries are added.

Caprimulgus batesi

It is not likely that the range was disjunct originally, since the KMMA has 28 specimens, from all forested districts.

Caprimulgus binotatus

This other forest nightjar species was collected much less often than *C. batesi*; there are still only 3 specimens from Zaïre in KMMA and a fourth is shown in the *Atlas* (Snow 1978). (The locality Mieri, Cameroon, belongs under *C. batesi*, not under this species—Louette 1981.)

Caprimulgus natalensis

Figure 1 gives all localities of specimens in the KMMA collection, and from Chapin (1939) and Verheyen (1953). The distribution suggests that *C. natalensis* is widespread at low elevation, along great rivers, but in general outside the dense forest region and that it is absent, or perhaps overlooked, in several areas. Lippens & Wille (1976) suggest it is known from other regions as well and mention breeding in Kwilu. *Birds of Africa*, following Harwin (1983), concludes that all birds in this general area are con-specific, a conclusion I can agree with after examination of the specimens from Zaïre, based on admitted size and colour variation among the central African populations and corroborated by the widespread distribution. In contrast, however, for *C. pectoralis*, *Birds of Africa* does not follow this same reasoning (see below).

Caprimulgus climacurus

The ranges of the 3 allospecies abut in the general area of northeastern Zaïre. The *Atlas* map is based on only 2 components in the superspecies (*climacurus* and *fossii*) and possible intra-African migrants of the 2 species are mapped along with the resident birds. However, the number of pale,

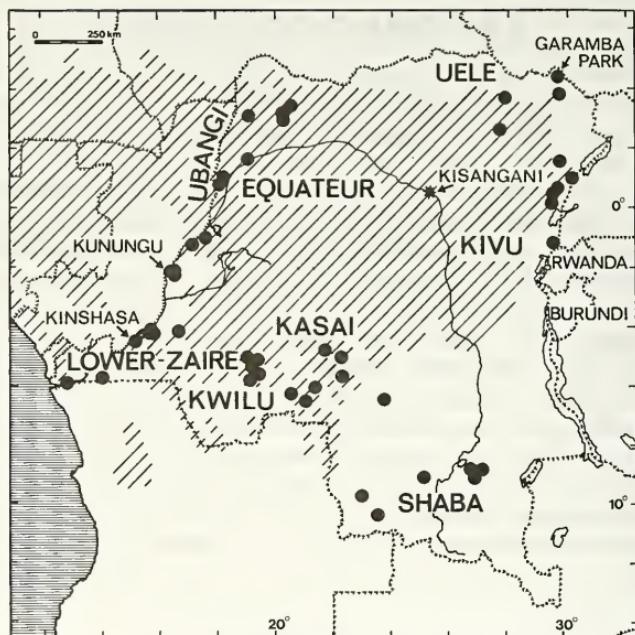


Figure 1. Distribution of *Caprimulgus natalensis* in Zaire (circles), with indication of regions and important localities mentioned.

straw-coloured specimens, which supposedly belong to the migratory nominate race of *climacurus*, is not great for Zaire, and all come from the northeast: Chapin (1939) mentioned 2 from Faradje ($3^{\circ}45'N$, $29^{\circ}42'E$), taken 7 February and 24 November; 3 were collected in the Garamba park (one on 18 January 1950, 2 others on 24 January 1950); and 2 pale birds in the KMMA are from Bambesa ($3^{\circ}28'N$, $25^{\circ}44'E$ —no date) and Angodia ($3^{\circ}32'N$, $25^{\circ}47'E$ —27 February 1941, moulting central rectrices). All other specimens are darker, but with considerable variation (some are rich rufous) and are considered to belong to the race *sclateri*. Even in the northern part of Uele (in the Garamba park) dark birds occur and predominate in the collection.

C. climacurus has long been known to exist as well near the middle Zaire River (although not from Lower Zaire, as mentioned erroneously by Schouteden 1951: specimens from Boma and Leopoldville are in fact *fossii*). It is also present in the Kasai (with one record in neighbouring Angola—Traylor 1963); however, the occurrence further south, in Shaba, apparent in the *Atlas* map, is doubtful, the specimens mentioned by Schouteden (1951) from Mutombo Mukulu and Kadia turning out to be *fossii*.

The species is present over most months of the year in the regions both north and south of the equatorial forest belt, moult there and stay months afterwards in fresh and later in worn plumage, so that it is very likely they are residents or at least not long-distance migrants. Two young birds from Kasai, both collected in January, are in the KMMA collection.

Lippens & Wille (1976) mention their discovery of 7 clutches between August and November, in K wilu, the region between the middle Zaïre river and Kasai. Thus it seems beyond question that the species breeds in this part of its range south of and adjoining the forest belt.

Caprimulgus clarus

The species "ranges widely" in Uganda (Britton 1980) so that its presence in Zaïre, near the border, is not at all unexpected. Indeed, Schouteden (1951) mentioned 2 specimens of the nominate race (= *Scotornis climacurus* according to Vrijdagh 1949, who indicated that "this species" is common in the "Plaine d'Ishwa" near Lake Albert in the dry season). Using the characteristics described in *Birds of Africa* and after comparison with East African material, I consider only one of Schouteden's 2 specimens belongs to *C. clarus*: a female collected on 18 December 1942. A separate bird from much further west—Angodia, 14 March 1943—is morphologically very similar (see also below). The second Schouteden specimen from Ishwa ($2^{\circ}12'N$, $31^{\circ}10'E$)—taken on the same day!) surprisingly is darker; it lacks the long central rectrices, but the other 4 pairs are graduated as in *C. climacurus sclateri*. Provisionally, I classify it with that species.

Schouteden (1951) had already mentioned that specimens of the race *apatelius*, supposedly collected in 'Uele', most probably originated in Lado, presently in Sudan.

Caprimulgus fossii

This is a common species in the southern part of the country, breeding there sympatrically with *climacurus*—immatures of this species were collected in Lower Zaïre in November, December and January. Its northernmost localities are in Uele (few), but it is not known to breed in the area in or north of the forest belt. In Equateur, 13 specimens were taken from May to August, and one in March. Perhaps surprisingly, there is a male specimen (undated) in arrested wing moult from Angodia, a locality whence also *climacurus climacurus* (moultling in February), *climacurus sclateri* (in fresh plumage in February) and 'clarus' (moultling in March) were collected. Some specimens are particularly yellowish (e.g. one from Luluabourg— $5^{\circ}56'S$, $22^{\circ}18'E$ —27 May 1965, another from Ikela, Equateur— $1^{\circ}08'S$, $23^{\circ}05'E$ —23 July 1957), up to the point that one wonders why, if these are merely a colour phase, the same would not apply to pale coloured birds of the related species *climacurus* (see above). On the other hand, there is no light-coloured migratory race described (see Clancey 1965).

Caprimulgus pectoralis

Basing myself on Zaïrean material, it is difficult to agree with *Birds of Africa* that *pectoralis* and *nigriscapularis* are different species, a conclusion based on vocal differences by Fry (1988) and possibly not of specific distinction. No one of the colour criteria proposed in *Birds of Africa* holds true for determination of the material at my disposal, for which there is variation in all geographical populations, not just in those certainly to be considered *pectoralis fervidus* (from Shaba). One of the 8 adult Kinshasa

TABLE 1
Measurements (mm) of *Caprimulgus pectoralis* and *C. "nigriscapularis"*

Region	n	Wing		Tail		White tail spot on R5	
		\bar{x}	range	\bar{x}	range	\bar{x}	range
Shaba	10 ♂♂	160.0	155.0–164.5	118.2	107.0–129.0	47.0	40.5–51.5 (9)
	11 ♀♀	158.0	146.0–162.5	115.5	109.0–123.5 (10)	34.2	20.5–42.5 (10)
Angola	♀	158.5		110.0		27.5	
Lower Zaire	5 ♂♂	148.7	147.0–154.5	112.1	108.0–114.5	38.6	35.0–41.0
	3 ♀♀	148.5	148.0–149.0	111.0	110.0–111.5	—	25.5–28.0 (2)
Kivu, Rwanda, Burundi } 2 ♂♂	147.5, 153.0			104.0–114.5		44.0–46.5	
	3 ♀♀	154.7	148.5–158.5	112.8	109.5–115.0	31.7	27.5–37.0

area specimens (considered as *nigriscapularis* by all previous authors, based on geographical distribution, here also as such, but based on size) is a rufous morph, 2 others from there are intermediate, while the other 5 are grey morphs; a bird from Kioppi, Burundi is a pale morph, compared with topotypical *nigriscapularis*, looking like a bleached version. All that can be said in favour of any (subspecific?) distinction is that the birds from Shaba are somewhat longer in wing and do have longer white tail tips than those from the Kinshasa area (Table 1, with which the measurements taken by Verheyen (1953) for his Shaba sample agree rather well). This size variation is in parallel with the situation in *C. natalensis* and *C. fossii*.

There is only one specimen from Kasai in KMMA, from Gandajika ($6^{\circ}44'S$, $23^{\circ}57'E$), in the border area with Shaba; its wing measures 160 mm (the tail is lacking). Chapin (1939) mentions a specimen from "20 miles south of Pania Mutombo" (c. $5^{\circ}30'S$, $23^{\circ}50'E$) in the Museum of Comparative Zoology and he considered the Kasai birds to belong to *fervidus*. The scarcity of this species there is altogether surprising because it seems widely distributed in adjoining Angola (Rosa Pinto 1983), with localities as close to Zaire as Duque de Bragança (specimen in KMMA) and Malanje, where they are possibly off-season migrants, although the species breeds on the central plateau of Angola (Traylor 1963). In Shaba *fervidus* is common and thought to be resident (Verheyen 1953). However, there is a specimen, inseparable in colour from *fervidus* (and also determined as such by Chapin), collected much more to the north, from between Goma and Rutshuru, Kivu at c. $1^{\circ}30'S$, $29^{\circ}20'E$ (another such specimen was taken at Rugege, Rwanda); but in size it is more like *nigriscapularis*, although the white tips to the tail feathers are indeed in the range of *fervidus*. All those from northeastern Zaire (= topotypical *nigriscapularis*) and neighbouring areas are intermediate in measurements between western and southern Zaire material, suggesting conspecificity.

Caprimulgus "nigriscapularis"

It is true that this taxon is "far more widespread in Congo basin and W Africa" as supposed in *Birds of Africa*; indeed it is known from Togo (De

Roo 1970) and is regular on the Adamawa Plateau in Cameroon (mentioned, but not shown on the *Birds of Africa* map). In Zaïre there are 9 recent specimens from the Kinshasa area (including a nestling, collected on 4 September 1979, confirming Chapin's discovery of breeding at Matadi).

Caprimulgus poliocephalus

The presence of the race *guttifer* in Zaïre rests on one specimen from Marungu (Dowsett & Prigogine 1974). I re-examined the other (supposed) representative from Mount Kabobo and find it to differ from the 'species' *C. ruwenzorii* only in its rather short white tips to the outer tail feathers for a male—47.5 mm on R5—whereas in 9 males from further north it is 52.5–66 mm, in 6 females 29–34.5 mm; *Birds of Africa* gives the range for male *ruwenzorii* as 46–68 mm. It is conceivable that the variation in these southernmost Zaïre populations will prove that they are intermediate for this character between *guttifer* and *ruwenzorii*, which latter is known from all mountain ranges to the north. It seems inconsistent to exclude *ruwenzorii* from the species *poliocephalus* on vocal characteristics (compared with all subspecies?), while morphologically it is in fact intermediate between 2 taxa admitted in the species, namely *guttifer* and nominate *poliocephalus*, which has all white outer rectrices in males.

Caprimulgus "ruwenzorii"

See under *C. poliocephalus*. *C. "ruwenzorii"* has also been collected in Rwanda and Burundi.

Caprimulgus inornatus

This species just reaches the equator in Zaïre, with specimens taken at Yokamba (Equateur) and Kisangani (Fig. 1). That it is "in December the commonest nightjar in Uelle" (=near Niangara, 3°42'N, 27°53'E—Chapin 1939) may well be, but over a longer period (November 1949 to September 1952, De Saeger 1954) the Parc National de la Garamba expedition collected there 10 specimens, but also 12 *Macrodiphteryx longipennis* and 21 *Caprimulgus climacurus*.

Caprimulgus tristigma

The distribution of this species is very restricted indeed in Zaïre, with 7 specimens from Uele and Ituri (nominate race) and 6 from southernmost Shaba (race *granosus*), with the 2 subspecies well-separated. This is in marked contrast to the kind of distribution and absence of subspeciation observed for *C. natalensis* (and *C. pectoralis* *sensu lato*?).

[*Caprimulgus fraenatus*]

I have expressed doubt on the alleged occurrence of this species in Zaïre, based on a non-existent specimen from "Butembo = Ruwenzori" (Louette 1988).

Caprimulgus europaeus

That this species is "rare or vagrant west of 30°E" (=virtually the whole of Zaïre—*Birds of Africa*) is stretching the evidence as there are no

less than 20 specimens from Zaïre in the KMMA, from all savanna districts except Lower Zaïre. (It has also been collected in Rwanda and Burundi.)

Caprimulgus rufigena

The status of *rufigena* in Zaïre can be somewhat better documented, after redetermination of several specimens, as follows: *April*: 2 from Equateur, 1 from Ubangi, 1 from Uele, 1 from Kisangani; *May*: 1 from Equateur, 1 from Kasai; *end of July*: 2 from Equateur; *August*: 18 from Equateur, 1 from Ubangi, (or September?), 1 from Shaba; *October*: 1 from Kasai; *without date*: 1 from Kasai, 1 from Kunungu, 1 from Equateur. These data seem to disprove the assumptions that it either winters in the western part of the country, because in that case one would have expected the species to have been collected in June–July, or breeds in the southern part: probably it is only a migrant in Zaïre. It seems that the return migration is decidedly over western Zaïre, while the onward one covers the whole country.

Macrodipteryx longipennis

Strictly confined to the northernmost border districts in Zaïre.

Macrodipteryx vexillarius

The most commonly collected species in Zaïre, over large parts of which it is migratory (275 specimens in KMMA).

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Polymorphism in *Diglossa humeralis aterrima* in southern Ecuador

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The Carbonated Flower-piercer *Diglossa carbonaria* superspecies of the northern Andes displays a complex pattern of allopatric speciation, hybridisation and phenotypic variation, though the work of Graves (1980a, 1980b, 1982) has done much to clarify this situation. Within the range of the superspecies, *Diglossa humeralis aterrima* (henceforth referred to by the subspecific epithet only) occurs between 6°S and 6°N, from Cutervo, northern Peru to Medillin, central Colombia (Graves 1982). This paper describes the first record of a rufous, 'hybrid-like' phenotype in *aterrima*, and also attempts to quantify the frequency of the grey-rumped 'nocticolor-type' morph known to occur in females.

During the course of ornithological work in the montane forest of the Rio Mazan Valley, Azuay Province, Ecuador (2°52'S, 79°7'W; 3000–3500 m a.s.l.), described in detail by King (1989), 35 *aterrima* were trapped in August and September 1987 (birds were marked with British Trust for Ornithology rings for individual recognition). This subspecies is typically uniform glossy black, with a wholly black bill (Hilty & Brown 1986, Graves 1982) but one individual, trapped on 4 August (BTO No. 2353603) possessed some atypical plumage features and the following field description was taken:

Whole of head including nape, throat and upper breast glossy black. Mantle, back and scapulars dark glossy blueish-black, rump greyer, grading into blackish upper tail coverts. Tail black. Upperwings wholly dark glossy blueish-black, lesser coverts paler, blueish-grey. Axillaries whiteish, edged chestnut. Whole of underparts excluding upper breast rufous-chestnut, including flanks and crissum. Legs grey, iris dark brown, bill black. Culmen (from anterior edge of nostril) 8.05 mm; bill depth (at anterior edge of nostril) 4.20 mm; wing (max. chord) 65.0 mm; weight 11.7 g. Prominent cloacal protrusion. The specimen was not collected, but a photographic record was obtained by Mr J. Dauris.

The rufous underparts and blueish plumage of this individual suggested an affinity with *D. brunneiventris*, populations of which occur at